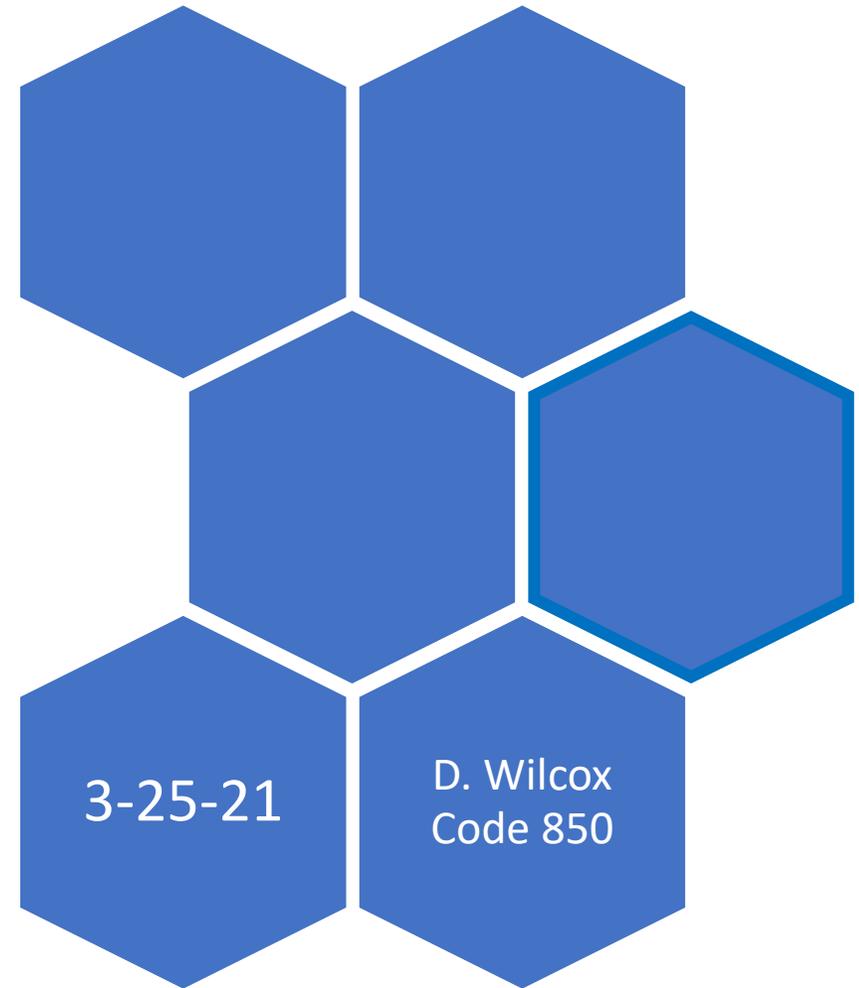
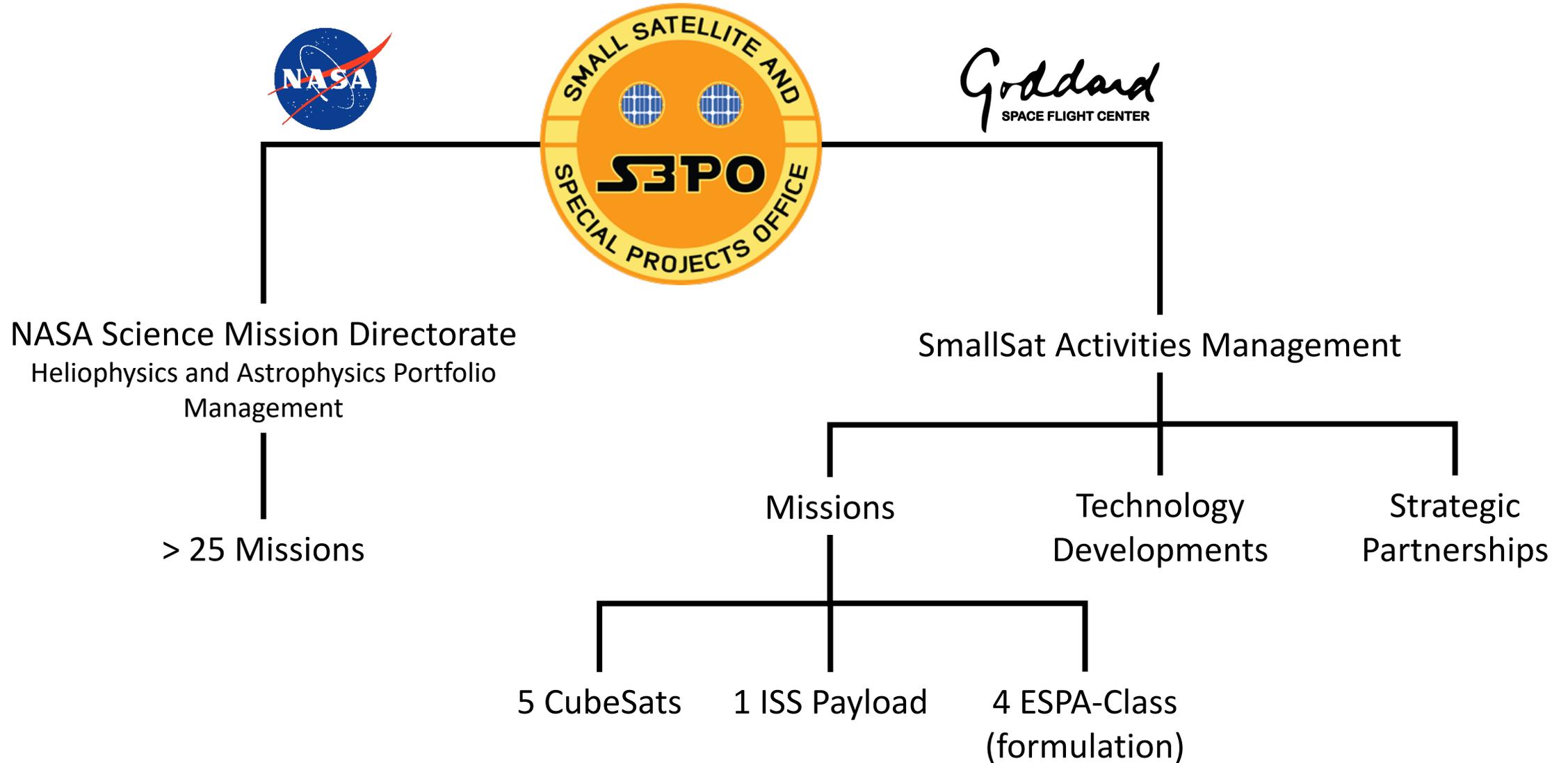


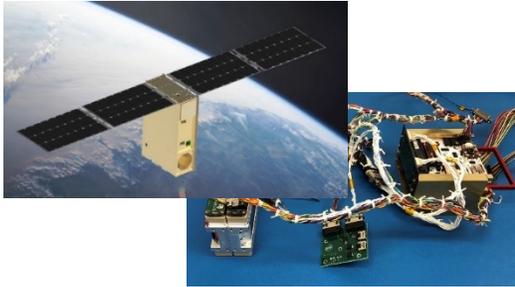


Smallsats @ GSFC

Center Update for HQ PI Forum



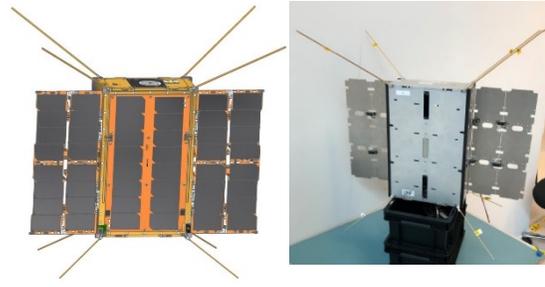




petitSat

Current Status: I&T

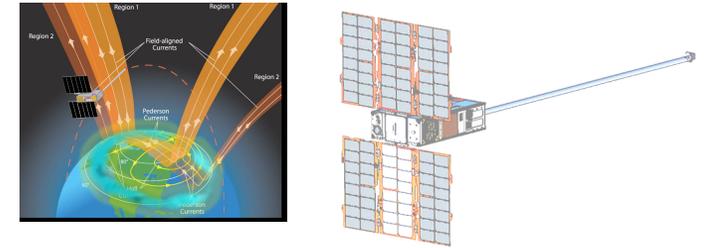
Launch: ISS December 2021



SNOOPI

Current Status: I&T

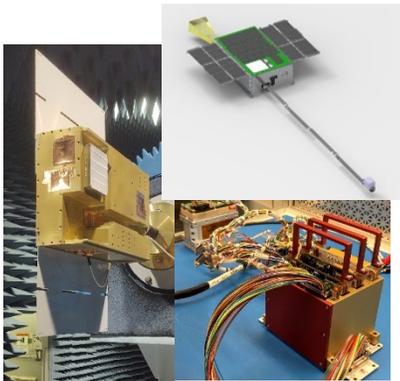
Launch: ISS December 2021



Dione

Current Status: Development

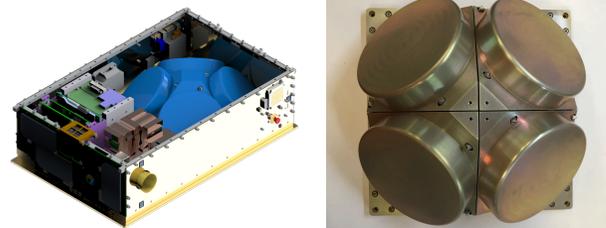
Launch: Polar TBD 2023



GTOSat

Current Status: I&T

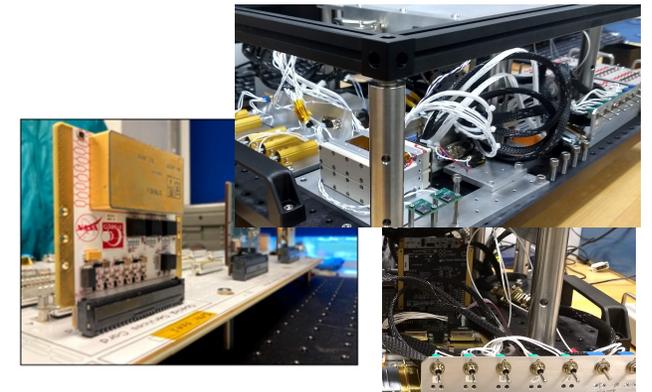
Launch: GTO TBD 2022



BurstCube

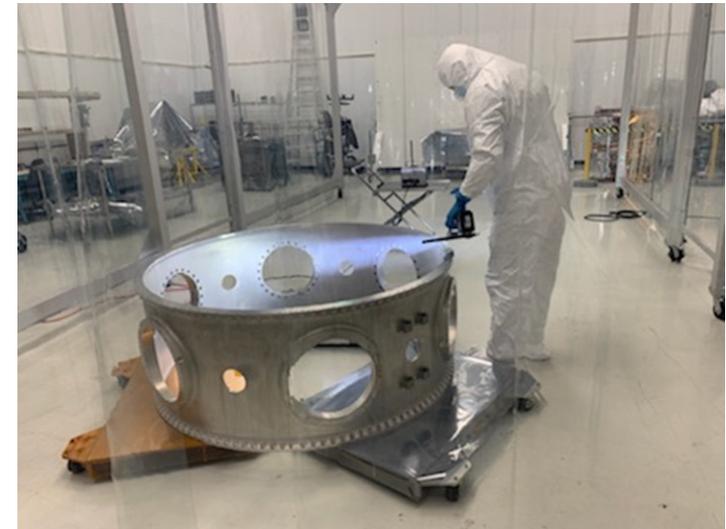
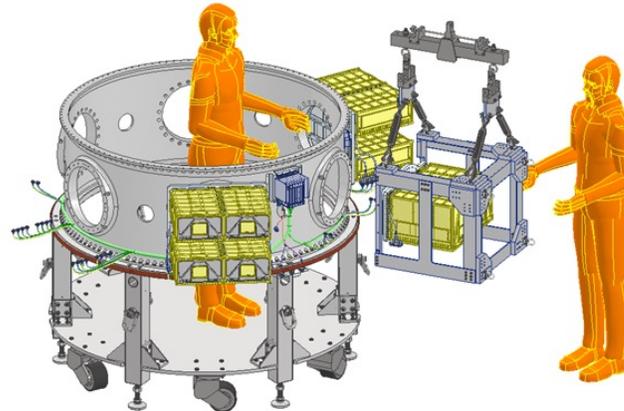
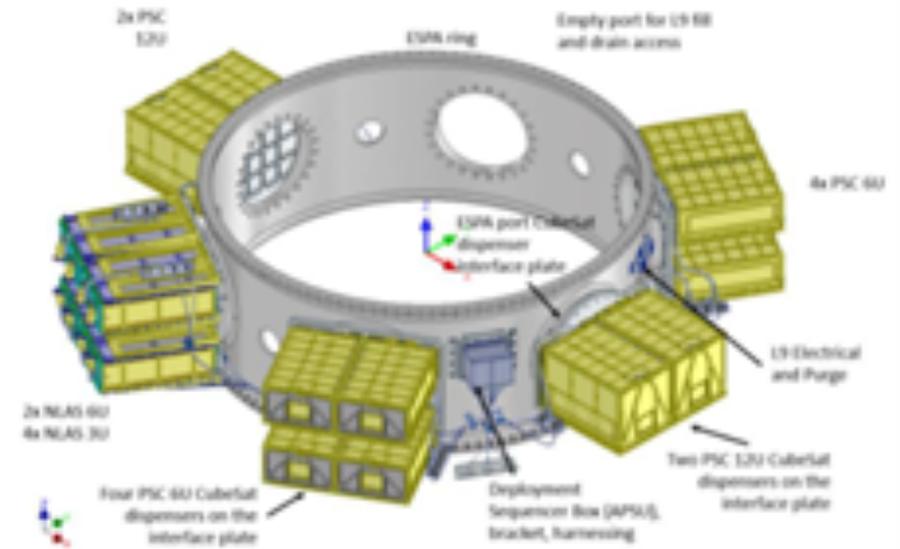
Current Status: I&T

Launch: ISS December 2022



LEO and Beyond-LEO FlatSats

- L9EFS is a separate “spacecraft” managed by Goddard and funded by the US Space Force Multi-Manifest Office (MMO).
- Spacecraft will ride under Landsat 9, stacked on an ATLAS V and is schedule to be launched in 2021.
- WFF is supporting the project as an integrator of the ESPA ring and associated port assemblies with multiple dispenser configurations, working in partnership with Parsons, the USSF MMO integrator
- **Status:** Integration underway at WFF; vibe testing on two port assemblies planned for April



- WFF UHF Ground Station, after being down since October 8, 2020 is now operational again as of this week!
- Recovery from major mechanical failures in the drive systems of a 60+ year old system were hampered by lack of parts (requiring manufacture) and weather restrictions

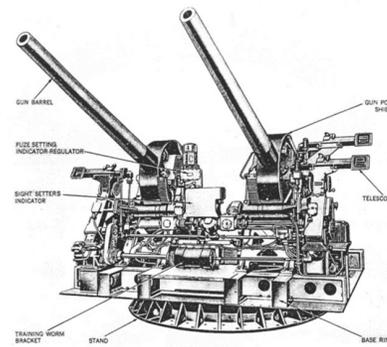
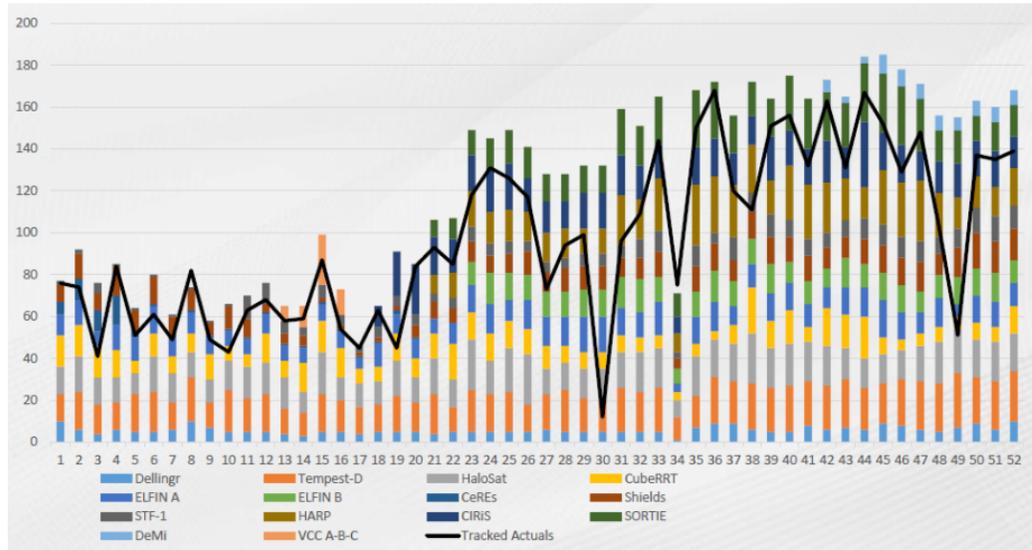
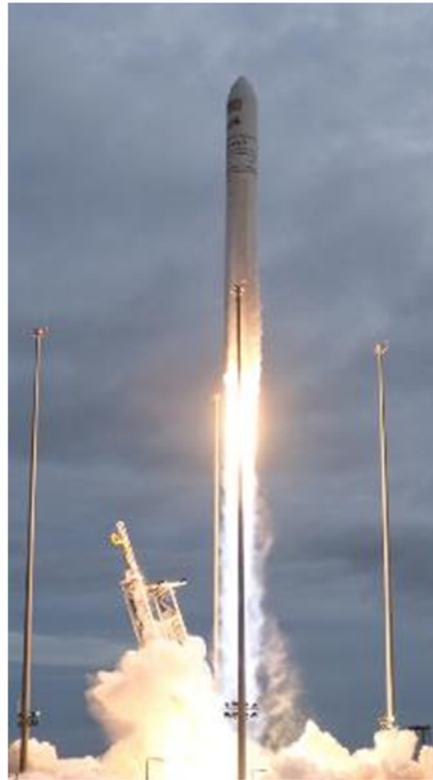


FIGURE 3 5-inch Mount Mk 32 Mod 2, Shield Removed—Front View.



- Antares continues ISS resupply (NG-16 July 2021)
- Rocket Lab @ WFF!
 - Enabling small launch capability via Electron
 - Neutron vehicle will offer significant Rideshare and Constellation capability
- NAFTU (NASA Autonomous Flight Termination Unit) certification is a top priority at WFF



Formulating New Missions

- GSFC is actively formulating and proposing new missions at the ESPA-class scale as well as initial Constellation missions
- GSFC is working aggressively to pursue partnerships with industry
- In parallel GSFC continues to offer unique Smallsat spacecraft solutions for unique and challenging mission applications

Smallsat Seminar Series

- Kudos to our GSFC Smallsat Chief Engineer Luis Santos!
- 19 Seminars to date
- SmallSat industry products and services focused mostly on industry bus solutions
- Contact Luis.H.Santos@nasa.gov to present (industry) or receive invitations to attend (anyone with NASA access)



WFF Mission Planning Lab

- Busy schedule supporting Pioneers missions and multiple Smallsat mission design studies
- Collaborating with GSFC Mission Design Lab



Technology Investments

- Significant progress on the development of the Modular Architecture for Resilient Extensible Smallsats (MARES)
 - Beyond-LEO technology
 - Currently being used for GTOSat
- Continue to develop software applications for broad community use: cFS, NOS3, OSK

MARES
A Sea of
Possibilities

